

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Sorrells *et al.*

Appl. No.: 09/550,644

Filed: April 14, 2000

For: **Method and System for Down-  
Converting an Electromagnetic  
Signal, Transforms for Same, and  
Aperture Relationships**

Confirmation No.: 9317

Art Unit: 2617

Examiner: Bhattacharya, Sam

Atty. Docket: 1744.0010009

**Fourteenth Supplemental Information Disclosure Statement**

***Mail Stop Amendment***

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Forms are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Applicants have listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

Applicants provide the following comments regarding the documents:

Documents US1, US2, and FP4-FP8 were cited in an Office Action in Israeli Patent Appl. No. 145,908, filed April 14, 2000, entitled "Device for Frequency Down-Converting Using Undersampling, and Method," directed to related subject matter.

Documents US3-US6 were cited in a Notice of Allowance in U.S. Patent Appl. No. 10/305,299, filed November 27, 2002, entitled "Method and Apparatus for Improving Dynamic Range in a Communication System," directed to related subject matter.

Documents US7 and US8 were cited in a Notice of Allowance in U.S. Patent Appl. No. 10/453,622, filed June 4, 2003, entitled "Active Polyphase Inverter Filter for Quadrature Signal Generation," directed to related subject matter.

Documents FP1-FP3 were cited in an Office Action in Japanese Patent Appl. No. 2000-577764, filed October 18, 1999, entitled "Applications of Universal Translation," directed to related subject matter.

This statement should not be construed as a representation that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below:

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not

received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.

- ☒ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.
- ☐ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.
- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to

the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

- ☐ c. An Online Credit Card Payment Authorization for the amount of \_\_\_\_\_ to cover payment of the fee under 37 C.F.R. § 1.17(p) is being transmitted with this filing.
- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$\_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to

the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.

☒ 6. A concise explanation of the relevance of the non-English language documents appears below in accordance with 37 C.F.R. § 1.98(a)(3):

Document FP1 (JP 58-031622) appears to describe a frequency converting circuit. An English abstract is enclosed as document NPL1.

Document FP2 (JP 61-245749) appears to describe a PCM signal transmission system for CATV. An English abstract is enclosed as document NPL2.

Document FP3 (JP 64-048557) appears to describe a circuit for reforming and modulating at least two data signals. An English abstract is enclosed as document NPL3.

Document FP4 (JP 59-022438) appears to describe a bipolar analog-frequency converting circuit. An English abstract is enclosed as document NPL4.

Document FP5 (JP 59-123318) appears to describe an analog-digital converting circuit. An English abstract is enclosed as document NPL5.

Document FP6 (JP 61-193521) appears to describe an analog-digital converting circuit. An English abstract is enclosed as document NPL6.

Document FP7 (JP 62-047214) appears to describe a digital-analog converting circuit. An English abstract is enclosed as document NPL7.

Document FP8 (JP 63-274214) appears to describe a digital/analog converting circuit. An English abstract is enclosed as document NPL8.

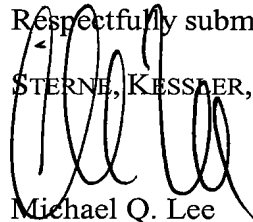
- ☒ 7. Copies of documents FP1-FP8 and NPL1-NPL8 are enclosed. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of the U.S. patents and patent application publications cited on the attached IDS Forms are not enclosed.
- ☐ 8. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. \_\_\_\_\_, filed \_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).
- ☒ 9. It is expected that the examiner will review the prosecution and cited art in the parent application nos. 09/521,879, filed March 9, 2000 (now abandoned), 09/293,342, filed April 16, 1999 (now U.S. Pat. No. 6,687,493), and 09/176,022, filed October 21, 1998 (now U.S. Pat. No. 6,061,551), in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution histories has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Michael Q. Lee  
Attorney for Applicants  
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Date: September 7, 2007

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Substitute for form 1449/PTO  <b>FOURTEENTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	09/550,644
				Filing Date	April 14, 2000
				First Named Inventor	David F. Sorrells
				Art Unit	2617
Examiner Name	Bhattacharya, Sam				
Sheet	1	of	1	Attorney Docket Number	1744.0010009

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If Known)			
	US1	4,771,265	09-13-1988	Okui <i>et al.</i>	
	US2	5,006,854	04-09-1991	White <i>et al.</i>	
	US3	3,643,168	02-15-1972	Manicki	
	US4	4,048,598	09-13-1977	Knight	
	US5	4,145,659	03-20-1979	Wolfram	
	US6	4,313,222	01-26-1982	Katthän	
	US7	5,896,347	04-20-1999	Tomita <i>et al.</i>	
	US8	6,259,293 B1	07-10-2001	Hayase <i>et al.</i>	
	US9				
	US10				
	US11				
	US12				
	US13				
	US14				
	US15	*			
	US16				
	US17				
	US18				
	US19				
	US20				

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	FP1	JP 58-031622	02-24-1983	Usui <i>et al.</i>		
	FP2	JP 61-245749	11-01-1986	Ito		
	FP3	JP 64-048557	02-23-1989	Booru <i>et al.</i>		
	FP4	JP 59-022438	02-04-1984	Shimizu		
	FP5	JP 59-123318	07-17-1984	Kune		
	FP6	JP 61-193521	08-28-1986	Takahashi		
	FP7	JP 62-047214	02-28-1987	Satou <i>et al.</i>		
	FP8	JP 63-274214	11-11-1988	Miyake		
	FP9					

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Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO  <b>FOURTEENTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	09/550,644
				Filing Date	April 14, 2000
				First Named Inventor	David F. Sorrells
				Art Unit	2617
				Examiner Name	Bhattacharya, Sam
				Attorney Docket Number	1744.0010009
Sheet	1	of	1		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	NPL1	English-language Abstract of Japanese Patent Publication No. JP 58-031622, data supplied by ep.espacenet.com, 1 page (Feb. 24, 1983 - Date of publication of application).	
	NPL2	English-language Abstract of Japanese Patent Publication No. JP 61-245749, data supplied by ep.espacenet.com, 1 page (Nov. 1, 1986 - Date of publication of application).	
	NPL3	English-language Abstract of Japanese Patent Publication No. JP 64-048557, data supplied by ep.espacenet.com, 1 page (Feb. 23, 1989 - Date of publication of application).	
	NPL4	English-language Abstract of Japanese Patent Publication No. JP 59-022438, data supplied by ep.espacenet.com, 1 page (Feb. 4, 1984 - Date of publication of application).	
	NPL5	English-language Abstract of Japanese Patent Publication No. JP 59-123318, data supplied by ep.espacenet.com, 1 page (July 17, 1984 - Date of publication of application).	
	NPL6	English-language Abstract of Japanese Patent Publication No. JP 61-193521, data supplied by ep.espacenet.com, 1 page (Aug. 28, 1986 - Date of publication of application).	
	NPL7	English-language Abstract of Japanese Patent Publication No. JP 62-047214, data supplied by ep.espacenet.com, 1 page (Feb. 28, 1987 - Date of publication of application).	
	NPL8	English-language Abstract of Japanese Patent Publication No. JP 63-274214, data supplied by ep.espacenet.com, 1 page (Nov. 11, 1988 - Date of publication of application).	
	NPL9		
	NPL10		

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Examiner Signature		Date Considered	
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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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